EV524133067

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application Serial No. 09/761,558
Confirmation No. 5930
Filing Date 1/16/2001
Inventorship .... Snyder
Applicant .... Microsoft Corporation
Group Art Unit 2671
Examiner .... Nguyen, Phu K.
Attorney's Docket No. MS1-531US
Title: Sampling-Efficient Mapping of Images

REQUEST FOR RECONSIDERATION OF ABANDOMENT:

NO ABANDONMENT IN FACT

To: Honorable Commissioner of Patents and Trademarks
P.O. Box 1450
Alexandria, VA 22313-1450

From: David M. Huntley (Tel. 509-324-9256; Fax 509-323-8979)
Lee & Hayes, PLLC
421 W. Riverside Avenue, Suite 500
Spokane, WA 99201

Sir:

A Notice of Abandonment, dated July 27, 2004, alleges that the above-captioned application is abandoned for failure to respond to the July 2, 2003 Office Action. However, Applicant did indeed respond to the July 2, 2003 Office Action in an Amendment dated December 22, 2003. Accordingly, the application should not have been abandoned, as there is no abandonment in fact.

The salient facts in this matter are as follows. Applicant received an Office Action dated July 2, 2003. Applicant timely responded to this Office Action in an Amendment dated December 22, 2003. The Amendment was accompanied by a two-month extension of time. These papers, a total of 43 pages, were sent to the Office by facsimile (to 703-872-9306) on December 22, 2003. An Auto-Reply report was received by Applicant from the Patent Office, indicating the Patent Office's receipt of the 43 pages. A copy of the papers as filed, along with the Auto-Reply, are submitted herewith.

It is noted that a two-month extension of time was inadvertently submitted, whereas a three-month extension of time was required. However, the Petition for Extension of Time that was filed also authorizes the Commissioner to charge any fees which may be required to a specified deposit account. Applicant submits that this constitutes a constructive petition for a three-month petition of time. 37 § CFR 1.136(a)(3) states, in part, that "An authorization to charge all required fees, fees under § 1.17, or all required extension of time fees will be treated as a constructive petition for an extension of time in any concurrent or future reply requiring a petition for an extension of time under this paragraph for its timely submission." Note also MPEP § 1702.02(e) (and particularly, page 700-146 of Rev. 2, May 2004). In view of the above,

filing a two-month extension of time, rather than a three-month extension of time, should not have precipitated the Notice of Abandonment.

Since there was no abandonment in fact, the Notice of Abandonment is erroneous. Applicant respectfully requests reconsideration of the Notice of Abandonment in accordance with the facts stated above and the provisions set forth in MPEP § 711.03. More specifically, Applicant respectfully requests that the above-captioned application be reinstated to active status, and that prosecution proceed on the basis of the December 22, 2003 Amendment, which is believed to place the application in condition for allowance. Finally, Applicant respectfully requests the Patent Office, in writing, to confirm that the application has been reinstated to active status.

If the Patent Office has any questions regarding this communication, the Patent Office is urged to contact the undersigned.

Respectfully Submitted,

Dated: August 23, 2004

By: David M. Huntley

David M. Huntley
Reg. No. 40,309
(509) 324-9256

EV524133067

Auto-Reply Facsimile Transmission

TO:	Fax Sender at 3035390271
Fax Information	
Date Received:	12/22/2003 7:07:08 PM [Eastern Standard Time]
Total Pages:	43 (including cover page)

ADVISORY: This is an automatically generated return receipt confirmation of the facsimile transmission received by the Office. Please check to make sure that the number of pages listed as received in Total Pages above matches what was intended to be sent. Applicants are advised to retain this receipt in the unlikely event that proof of this facsimile transmission is necessary. Applicants are also advised to use the certificate of facsimile transmission procedures set forth in 37 CFR 1.8(a) and (b), 37 CFR 1.6(f). Trademark Applicants, also see the Trademark Manual of Examining Procedure (TMEP) section 306 et seq.

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Page
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DEC 22 2003 17:06 FR LEE AND HAYES -PLLC 3035390271 TO 17038729306 P.01/43

PTO/SB/97 (08-03)
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U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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Application Number: 09/761,558

Filing Date: Jan 16, 2001

Certificate of Transmission under 37 CFR 1.8

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on 12-22-03 .
Date

Michelle Trujillo
Signature

Michelle G. Trujillo
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Note: Each paper must have its own certificate of transmission, or this certificate must identify each submitted paper.

The follwoing documents are being transmitted via facsimile to (703) 872-9306, and are to be filed with the United States Patent and Trademark Office:

Response Transmittal (1 page);
Petition for Extension of Time (+ copy, 2 pages);
Response (39 pages)

Burden Hour Statement: This form is estimated to take 0.03 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

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Petition for Extension of Time (+ copy, 2 pages);
Response (39 pages)

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TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Application Number	09/761,558
Filing Date	Jan 16, 2001
First Named Inventor	Mitchell
Group Art Unit	2671
Examiner Name	NGUYEN, PHU K
Attorney Docket Number	MS1-531US

Total Number of Pages in This Submission: 43

ENCLOSURES *(check all that apply)*

- [ ] Fee Transmittal Form
  - [ ] Fee Attached
- [x] Amendment / Reply
  - [ ] After Final
  - [ ] Affidavits/declaration(s)
- [x] Extension of Time Request
- [ ] Express Abandonment Request
- [ ] Information Disclosure Statement
- [ ] Certified Copy of Priority Document(s)
- [ ] Response to Missing Parts/ Incomplete Application
  - [ ] Response to Missing Parts under 37 CFR 1.52 or 1.53
- [ ] Assignment Papers *(for an Application)*
- [ ] Drawing(s) Sheets
- [ ] Licensing-related Papers
- [ ] Petition
- [ ] Petition to Convert to a Provisional Application
- [ ] Power of Attorney, Revocation Change of Correspondence Address
- [ ] Terminal Disclaimer
- [ ] Request for Refund
- [ ] CD, Number of CD(s) ______
- [ ] After Allowance Communication to Group
- [ ] Appeal Communication to Board of Appeals and Interferences
- [ ] Appeal Communication to Group (*Appeal Notice, Brief, Reply Brief*)
- [ ] Proprietary Information
- [ ] Status Letter
- [ ] Other Enclosure(s) *(please identify below)*:

Remarks

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm *or* Individual name	Thomas A. Jolly, Reg. No. 39,241
Signature	TAJolly
Date	12/22/2003

CERTIFICATE OF TRANSMISSION VIA FACSIMILE

I hereby certify that the items listed above as enclosed are being transmitted via facsimile to (703) 872-9306 to, The Commissioner of Patents, Alexandria, VA 22313 on the below-indicated date.

Typed or printed name	Michelle G. Trujillo		
Signature	Michelle Trujillo	Date	12-22-03

PTO/SB/22 (10-00)
Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

PETITION FOR EXTENSION OF TIME UNDER 37 CFR 1.136(a)

Docket Number (Optional): MS1-531US

In re Application of: Microsoft Corporation

Application Number: 09/761,558

Filed: Jan 16, 2001

For: Sampling-Efficient Mapping of Images

Group Art Unit: 2671

Examiner: NGUYEN, PHU K

This is a request under the provisions of 37 CFR 1.136(a) to extend the period for filing a reply in the above identified application.

The requested extension and appropriate non-small-entity fee are as follows (check time period desired):

- ☐ One month (37 CFR 1.17(a)(1)) $______
- ☑ Two months (37 CFR 1.17(a)(2)) $ 420.00
- ☐ Three months (37 CFR 1.17(a)(3)) $______
- ☐ Four months (37 CFR 1.17(a)(4)) $______
- ☐ Five months (37 CFR 1.17(a)(5)) $______

☐ Applicant claims small entity status. See 37 CFR 1.27. Therefore, the fee amount shown above is reduced by one-half, and the resulting fee is: $________.

☐ A check in the amount of the fee is enclosed.

☐ Payment by credit card. Form PTO-2038 is attached.

☐ The Commissioner has already been authorized to charge fees in this application to a Deposit Account.

☑ The Commissioner is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number 12-0769.
I have enclosed a duplicate copy of this sheet.

I am the ☐ applicant/inventor

☐ assignee of record of the entire interest. See 37 CFR 3.71.
Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96).

☐ attorney or agent of record.

☑ attorney or agent under 37 CFR 1.34(a).
Registration number if acting under 37 CFR 1.34(a) 39,241.

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

12/22/2003
Date

[signature]
Signature

Thomas A. Jolly
Typed or printed name

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.

☑ Total of 1 forms are submitted.

PTO/SB/22 (10-00)
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U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

PETITION FOR EXTENSION OF TIME UNDER 37 CFR 1.136(a)	Docket Number (Optional) MS1-531US

In re Application of Microsoft Corporation	
Application Number 09/761,558	Filed Jan 16, 2001
For Sampling-Efficient Mapping of Images	
Group Art Unit 2671	Examiner NGUYEN, PHU K

This is a request under the provisions of 37 CFR 1.136(a) to extend the period for filing a reply in the above identified application.

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- ☐ One month (37 CFR 1.17(a)(1)) $______
- ☑ Two months (37 CFR 1.17(a)(2)) $ 420.00
- ☐ Three months (37 CFR 1.17(a)(3)) $______
- ☐ Four months (37 CFR 1.17(a)(4)) $______
- ☐ Five months (37 CFR 1.17(a)(5)) $______

- ☐ Applicant claims small entity status. See 37 CFR 1.27. Therefore, the fee amount shown above is reduced by one-half, and the resulting fee is: $______.
- ☐ A check in the amount of the fee is enclosed.
- ☐ Payment by credit card. Form PTO-2038 is attached.
- ☐ The Commissioner has already been authorized to charge fees in this application to a Deposit Account.
- ☑ The Commissioner is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number 12-0769. I have enclosed a duplicate copy of this sheet.

I am the
- ☐ applicant/inventor
- ☐ assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96).
- ☐ attorney or agent of record.
- ☑ attorney or agent under 37 CFR 1.34(a).
  Registration number if acting under 37 CFR 1.34(a) 39,241.

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12/22/2003
Date

Signature

Thomas A. Jolly
Typed or printed name

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.

☑ Total of 1 forms are submitted.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application Serial No. 09/761,558
Filing Date .... Jan 16, 2001
Inventorship .... Mitchell et al.
Applicant .... Microsoft Corporation
Group Art Unit 2671
Examiner .... NGUYEN, PHU K
Attorney's Docket No. MS1-531US
Title: Sampling-Efficient Mapping of Images

RESPONSE TO OFFICE ACTION DATED (MAILED) 07/02/2003

To: Honorable Commissioner for Patents
P.O. Box 1450
Alexandria VA 22313-1450

From: Thomas A. Jolly (Tel. 509-324-9256; Fax 509-323-8979)
Lee & Hayes, PLLC
421 W. Riverside Avenue, Suite 500
Spokane, WA 99201

RESPONSE

Sir:

A listing of claims begins on page 2 of this paper.

Remarks/Arguments begin on page 20 of this paper.

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (original) A method comprising:

providing a first texture map for a first portion of a three-dimensional surface, the first texture map being associated with a first mapping technique; and

providing a second texture map for a second portion of the three-dimensional surface, the second texture map being associated with a second mapping technique that is different from the first mapping technique.

2. (original) The method as recited in Claim 1, wherein the first texture map includes cylindrical projection information for the first portion, and the second texture map includes azimuthal projection information for the second portion.

3. (original) The method as recited in Claim 2, the method further comprising:

providing a third texture map for a third portion of the three-dimensional surface, the third texture map being associated with the second

mapping technique, and wherein the third texture map includes azimuthal projection information for the third portion.

4. (original) The method as recited in Claim 3, wherein the cylindrical projection information includes plane-chart projection information.

5. (original) The method as recited in Claim 3, wherein the azimuthal projection information includes equidistant projection information.

6. (original) The method as recited in Claim 2, wherein the first and second texture maps are stretch-invariant and have a sampling requirement definable as:

$$M_{\text{capped}}(\theta) \equiv M_{\text{equi}}(\theta) + M_{\text{plane}}(\pi/2-\theta) = 4\theta^2 + 2\pi(\pi/2-\theta)$$

where θ is a transition angle from a defined point on the surface to where the second texture map is adjacent to the first texture map.

7. (original) The method as recited in Claim 6, wherein θ is equal to about 45°.

8. (original) The method as recited in Claim 4, wherein providing the first texture map further includes hexagonally re-parameterizing the cylindrical projection information using a linear transform.

9. (original) The method as recited in Claim 8, wherein the linear transform is definable as:

$$\hat{\mathbf{S}}(u,v) \equiv \mathbf{S}(\mathbf{V}(u,v)')$$

where

$$\mathbf{V} \equiv \begin{bmatrix} k & k/2 \\ 0 & 1 \end{bmatrix}$$

and $k \equiv 2\sqrt{3}/3$.

10. (original) The method as recited in Claim 1, wherein the first texture map includes Mercator projection information for the first portion, and the second texture map includes stereographic projection information for the second portion.

11. (original) The method as recited in Claim 10, the method further comprising:

providing a third texture map for a third portion of the three-dimensional surface, the third texture map being associated with the second mapping technique, and wherein the third texture map includes stereographic projection information for the third portion.

12. (original) The method as recited in Claim 10, wherein the first and second texture maps are conformal and have a sampling requirement definable as:

$$M_{\text{capped}}(\theta) \equiv M_{\text{stereo}}(\theta) + M_{\text{Mercator}}(\pi/2-\theta) = 16\tan^2(\theta/2) + \pi\ln((1+\cos\theta)/(1-\cos\theta))$$

where θ is a transition angle from a defined point on the surface to where the second texture map is adjacent to the first texture map.

13. (original) The method as recited in Claim 12, wherein θ is equal to about 47.8°

14. (original) The method as recited in Claim 3, wherein the cylindrical projection information includes information selected from at least one type of projection information selected from a group comprising plane-chart projection information, equal area information, and Mercator information.

15. (original) The method as recited in Claim 3, wherein the azimuthal projection information includes information selected from at least one type of projection information selected from a group comprising equidistant projection information, stereographic projection information, gnomonic projection information, and equal area projection information.

16. (original) The method as recited in Claim 3, wherein the first portion is significantly adjacent to both the first and second portions, such that the first portion separates the second and third portions.

17. (original) The method as recited in Claim 1, wherein the three-dimensional surface is curvilinear.

18. (original) The method as recited in Claim 1, wherein the three-dimensional surface includes a spherical surface.

19. (original) The method as recited in Claim 1, wherein providing the first texture map further includes generating the first texture map using the first mapping technique, and providing the second texture map further includes generating the second texture map using the second mapping technique.

20. (original) The method as recited in Claim 1, wherein at least one of the first and second texture maps includes information based on a rectangular sampling matrix.

21. (original) The method as recited in Claim 1, wherein at least one of the first and second texture maps includes information based on a hexagonal sampling matrix.

22. (original) A computer-readable medium providing computer instructions suitable for performing steps comprising:

providing a first texture map for a first portion of a three-dimensional surface, the first texture map being associated with a first mapping technique; and

providing a second texture map for a second portion of the three-dimensional surface, the second texture map being associated with a second mapping technique that is different from the first mapping technique.

23. (original) The computer-readable medium as recited in Claim 22, wherein the first texture map includes cylindrical projection information for the first portion, and the second texture map includes azimuthal projection information for the second portion.

24. (original) The computer-readable medium as recited in Claim 23, further comprising computer instructions suitable for performing the step of:

providing a third texture map for a third portion of the three-dimensional surface, the third texture map being associated with the second mapping technique, and wherein the third texture map includes azimuthal projection information for the third portion.

25. (original) The computer-readable medium as recited in Claim 24, wherein the cylindrical projection information includes plane-chart projection information.

26. (original) The computer-readable medium as recited in Claim 24, wherein the azimuthal projection information includes equidistant projection information.

27. (original) The computer-readable medium as recited in Claim 23, wherein the first and second texture maps are stretch-invariant and have a sampling requirement definable as:

$$M_{\text{capped}}(\theta) \equiv M_{\text{equi}}(\theta) + M_{\text{plane}}(\pi/2 - \theta) = 4\theta^2 + 2\pi(\pi/2 - \theta)$$

where θ is a transition angle from a defined point on the surface to where the second texture map is adjacent to the first texture map.

28. (original) The computer-readable medium as recited in Claim 27, wherein θ is equal to about 45°.

29. (original) The computer-readable medium as recited in Claim 25, wherein providing the first texture map further includes means for hexagonally re-parameterizing the cylindrical projection information using a linear transform.

30. (original) The computer-readable medium as recited in Claim 29, wherein the linear transform is definable as:

$$\hat{\mathbf{S}}(u,v) \equiv \mathbf{S}(\mathbf{V}(u,v)')$$

where

$$\mathbf{V} \equiv \begin{bmatrix} k & k/2 \\ 0 & 1 \end{bmatrix}$$

and $k \equiv 2\sqrt{3}/3$.

31. (original) The computer-readable medium as recited in Claim 22, wherein the first texture map includes Mercator projection information for the first portion, and the second texture map includes stereographic projection information for the second portion.

32. (original) The computer-readable medium as recited in Claim 31, further comprising computer instructions suitable for performing the step of:

providing a third texture map for a third portion of the three-dimensional surface, the third texture map being associated with the second mapping technique, and wherein the third texture map includes stereographic projection information for the third portion.

33. (original) The computer-readable medium as recited in Claim 31, wherein the first and second texture maps are conformal and have a sampling requirement definable as:

$$M_{\text{capped}}(\theta) \equiv M_{\text{stereo}}(\theta) + M_{\text{Mercator}}(\pi/2 - \theta) = 16\tan^2(\theta/2) + \pi \ln((1+\cos\theta)/(1-\cos\theta))$$

where θ is a transition angle from a defined point on the surface to where the second texture map is adjacent to the first texture map.

34. (original) The computer-readable medium as recited in Claim 33, wherein θ is equal to about 47.8°

35. (original) The computer-readable medium as recited in Claim 24, wherein the cylindrical projection information includes information selected from at least one type of projection information selected from a group comprising plane-chart projection information, equal area information, and Mercator information.

36. (original) The computer-readable medium as recited in Claim 24, wherein the azimuthal projection information includes information selected from at least one type of projection information selected from a group comprising equidistant projection information, stereographic projection information, gnomonic projection information, and equal area projection information.

37. (original) The computer-readable medium as recited in Claim 24, wherein the first portion is significantly adjacent to both the first and second portions, such that the first portion separates the second and third portions.

38. (original) The computer-readable medium as recited in Claim 22, wherein the three-dimensional surface is curvilinear.

39. (original) The computer-readable medium as recited in Claim 22, wherein the three-dimensional surface includes a spherical surface.

40. (original) The computer-readable medium as recited in Claim 22, wherein providing the first texture map further includes generating the first texture map using the first mapping technique, and providing the second texture map further includes generating the second texture map using the second mapping technique.

41. (original) The computer-readable medium as recited in Claim 22, wherein at least one of the first and second texture maps includes information based on a rectangular sampling matrix.

42. (original) The computer-readable medium as recited in Claim 22, wherein at least one of the first and second texture maps includes information based on a hexagonal sampling matrix.

43. (original) An apparatus comprising:

logic configured to provide a first texture map for a first portion of a three-dimensional surface, the first texture map being associated with a first mapping technique and a second texture map for a second portion of the three-dimensional surface, the second texture map being associated with a second mapping technique that is different from the first mapping technique, and wherein the logic is further configured to output graphically displayable information based on at least a portion of the first and second texture maps.

44. (original) The apparatus as recited in Claim 43, wherein the first texture map includes cylindrical projection information for the first portion, and the second texture map includes azimuthal projection information for the second portion.

45. (original) The apparatus as recited in Claim 44, wherein the logic is further configured to provide a third texture map for a third portion of the three-dimensional surface, the third texture map being associated with the second

mapping technique, and wherein the third texture map includes azimuthal projection information for the third portion.

46. (original) The apparatus as recited in Claim 45, wherein the cylindrical projection information includes plane-chart projection information.

47. (original) The apparatus as recited in Claim 45, wherein the azimuthal projection information includes equidistant projection information.

48. (original) The apparatus as recited in Claim 44, wherein the first and second texture maps are stretch-invariant and have a sampling requirement definable as:

$$M_{\text{capped}}(\theta) \equiv M_{\text{equi}}(\theta) + M_{\text{plane}}(\pi/2 - \theta) = 4\theta^2 + 2\pi(\pi/2 - \theta)$$

where θ is a transition angle from a defined point on the surface to where the second texture map is adjacent to the first texture map.

49. (original) The apparatus as recited in Claim 48, wherein θ is equal to about 45°.

50. (original) The apparatus as recited in Claim 46, wherein the cylindrical projection information in the first texture map has been hexagonally re-parameterized the using a linear transform.

51. (original) The apparatus as recited in Claim 50, wherein the linear transform is definable as:

$$\hat{\boldsymbol{S}}(u,v) \equiv \boldsymbol{S}(\boldsymbol{V}(u,v)')$$

where

$$\boldsymbol{V} \equiv \begin{bmatrix} k & k/2 \\ 0 & 1 \end{bmatrix}$$

and $k \equiv 2\sqrt{3}/3$.

52. (original) The apparatus as recited in Claim 43, wherein the first texture map includes Mercator projection information for the first portion, and the second texture map includes stereographic projection information for the second portion.

53. (original) The apparatus as recited in Claim 52, wherein the logic is further configured to provide a third texture map for a third portion of the three-dimensional surface, the third texture map being associated with the second mapping technique, and wherein the third texture map includes stereographic projection information for the third portion.

54. (original) The apparatus as recited in Claim 52, wherein the first and second texture maps are conformal and have a sampling requirement definable as:

$$M_{\text{capped}}(\theta) \equiv M_{\text{stereo}}(\theta) + M_{\text{Mercator}}(\pi/2 - \theta) = 16\tan^2(\theta/2) + \pi\ln\left((1+\cos\theta)/(1-\cos\theta)\right)$$

where θ is a transition angle from a defined point on the surface to where the second texture map is adjacent to the first texture map.

55. (original) The apparatus as recited in Claim 54, wherein θ is equal to about 47.8°.

56. (original) The apparatus as recited in Claim 45, wherein the cylindrical projection information includes information selected from at least one type of projection information selected from a group comprising plane-chart projection information, equal area information, and Mercator information.

57. (original) The apparatus as recited in Claim 45, wherein the azimuthal projection information includes information selected from at least one type of projection information selected from a group comprising equidistant projection information, stereographic projection information, gnomonic projection information, and equal area projection information.

58. (original) The apparatus as recited in Claim 45, wherein the first portion is significantly adjacent to both the first and second portions, such that the first portion separates the second and third portions.

59. (original) The apparatus as recited in Claim 43, wherein the three-dimensional surface is curvilinear.

60. (original) The apparatus as recited in Claim 43, wherein the three-dimensional surface includes a spherical surface.

61. (original) The apparatus as recited in Claim 43, wherein the logic is further configured to analyze the texture map per at least one criterion to determine an appropriate texture resolution when providing the first texture map.

62. (original) The apparatus as recited in Claim 43, wherein the logic is further configured to analyze the texture map per at least one metric criterion to determine a requisite number of texture maps in addition to the first texture map when providing the first texture map.

63. (original) The apparatus as recited in Claim 43, wherein at least one of the first and second texture maps includes information based on a rectangular sampling matrix.

64. (original) The apparatus as recited in Claim 43, wherein at least one of the first and second texture maps includes information based on a hexagonal sampling matrix.

65. (original) A polar-capped map set for use in computer generated graphics, the polar-capped map set comprising:

a cylindrical projection map; and

at least one azimuthal projection map.

66. (original) The polar-capped map as recited in Claim 65, wherein the polar-capped map is a stretch-invariant map.

67. (original) The polar-capped map as recited in Claim 65, wherein the polar-capped map is a conformal map.

68. (original) A method for generating a low-distortion area-preserving map for use in stochastic ray tracing computer generated graphics, the method comprising:

projecting sampling patterns onto a three-dimensional surface; and

projecting the resulting three-dimensional surface samples into two-dimensional histogram bins.

69. (original) The method as recited in Claim 68, wherein projecting the sampling patterns includes a projection, $(u,v) = \boldsymbol{S}^{-1}(x,y,z)$, that is defined by the composition of at least two area-preserving bijections, wherein a first area-preserving bijection is a mapping from a hemisphere to a disk $(u,v) = (x,y)/\sqrt{1+z}$, a second area-preserving bijection is from a disk to a half disk $(r',\theta') = (r,\theta/2)$.

70. (original) The method as recited in Claim 1, wherein providing the first texture map further includes analyzing the texture map per at least one criterion to determine an appropriate texture resolution.

71. (original) The method as recited in Claim 1, wherein providing the first texture map further includes analyzing the texture map per at least one metric criterion to determine a requisite number of texture maps in addition to the first texture map.

72. (original) The computer-readable medium as recited in Claim 22, wherein providing the first texture map further includes analyzing the texture map per at least one criterion to determine an appropriate texture resolution.

73. (original) The computer-readable medium as recited in Claim 22, wherein providing the first texture map further includes analyzing the texture map per at least one metric criterion to determine a requisite number of texture maps in addition to the first texture map.

REMARKS

Original Claims 1-73 are pending.

Objections

The drawings have been objected under 37 CFR 1.83(a) for allegedly failing to show the "two-dimensional histogram bins" feature as recited in Claim 68. The specification is also objected to under 37 CFR 1.75(d)(1) and MPEP 608.01(o) for failing to provide proper antecedent bases for the "two-dimensional histogram bins" feature as recited in Claim 68.

These objections are respectfully traversed as it is pointed out that the method for generating a low-distortion area-preserving map for use in stochastic ray tracing computer generated graphics as recited in Claim 68 is supported by the resulting low-distortion area-preserving map of Fig. 20 and described in detail beginning on page 32, at line 9, and extending to page 33, line 11. The act of projecting the resulting three-dimensional surface samples into two-dimensional histogram bins is akin to selectively storing or otherwise arranging data in a particular manner. The data stored/arranged in the act happens to be in two-dimensional histogram bins, which may be operatively configured in RAM 35, of Fig. 1, for example.

Rejections under 35 U.S.C. §102(e)

Claims 65-67 stand rejected as being anticipated by *Xiong* (U.S. Patent No. 6,359,617). Applicants traverse these rejections for at least the reasons stated below. It is respectfully requested that the rejections be reconsidered and withdrawn.

Xiong teaches techniques for generating virtual panoramic images by pair-wise registering rectangular images together and then using an error function in an iterative manner to combine the images in a projective transformation.

Claim 65 is an independent claim directed towards a polar-capped map set for use in computer generated graphics. The polar-capped map set includes a cylindrical projection map, and at least one azimuthal projection map.

Xiong neither discloses nor reasonably suggests such a polar-capped map set. The Office Action points to *Xiong*, col. 8, lines 42-47, as disclosing the polar-capped map set. Closer analysis of *Xiong* shows that *Xiong* is simply reciting a long list of different types of image "geometries and projections possible during the construction and employment of panoramas" using *Xiong's* techniques. Xiong does not, however, disclose a polar-capped map set as recited in Claim 65 that combines a cylindrical projection map and at least one azimuthal projection map.

Claims 66 and 67 depend from independent Claim 65. As such, the exemplary reasons stated above applicable to these claims also. These dependent claims add additional elements/limitations to Claim 43 further distinguishing the claims over the cited art.

Claim 66 recites that the polar-capped map is a stretch-invariant map. This is clearly not described by *Xiong*. Here, the Office Action states that *Xiong* somehow discloses such by simply listing that his techniques may work with equidistant projections. *Xiong* lists various exemplary geometries and projections but does not disclose or otherwise even suggest combining different geometries/projections. Rather, *Xiong's* techniques are directed towards selecting one of these geometries/projections.

Claim 67 specifies that the polar-capped map is a conformal map. This polar-capped map set is not taught nor suggested by *Xiong*. Here, the Office Action points to the listing of "Lambert conformal conic" projections as teaching the polar-capped map of Claim 67. Again, this is just one of many different listed exemplary geometries/projections that *Xiong* felt compelled to mention in column 8. Clearly, *Xiong's* statement does not disclose or otherwise reasonably suggest the claimed polar-capped map.

Rejections under 35 U.S.C. §103(a)

Claims 1-64, 70-73 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Xiong*. Applicants respectfully traverse these rejections for at least the following reasons and respectfully requested that the rejections be reconsidered and withdrawn.

Claim 1 is an independent claim directed towards a method that includes providing a first texture map for a first portion of a three-dimensional surface, the

first texture map being associated with a first mapping technique, and providing a second texture map for a second portion of the three-dimensional surface, the second texture map being associated with a second mapping technique that is different from the first mapping technique. *Xiong* neither discloses nor reasonably suggests such a method.

By way of example, as previously mentioned *Xiong* does not disclose or suggest nor would *Xiong* tolerate combining in anyway different types of map information.. Instead *Xiong* selects images that share the same geometry and/or projection and then works to combine these to form a virtual panorama image. See, e.g., column 8, lines 18-33, where *Xiong* states that "the panorama is constructed on a particular geometry". The two-dimensional images and resulting three-dimensional in *Xiong* need to share a common geometry to support the blending process being taught. For example, *Xiong* teaches that overlapping rectangular images can be blended together using a blending mask after being configured in a Laplacian pyramid.

Claims 2-21, 70 and 71 depend from independent Claim 1. Hence, the exemplary reasons stated above apply to these dependent claims too. These dependent claims add additional elements/limitations to the method in Claim 1 which serve to further distinguish the claims over the cited art.

Claim 2 further recites that the first texture map includes cylindrical projection information for the first portion, and the second texture map includes

azimuthal projection information for the second portion. The cited art fails to disclose or otherwise suggests this method.

Claim 3 states that the method further that includes providing a third texture map for a third portion of the three-dimensional surface, the third texture map being associated with the second mapping technique, and wherein the third texture map includes azimuthal projection information for the third portion. This method is not taught nor suggested by *Xiong*.

In **Claim 4** the cylindrical projection information includes plane-chart projection information. This method is not taught nor suggested by *Xiong*.

Claim 5 specifies that the azimuthal projection information includes equidistant projection information. *Xiong* neither discloses nor reasonably suggests such a method.

Claim 6 recites that the first and second texture maps are stretch-invariant and have a sampling requirement definable as:

$$M_{\text{capped}}(\theta) \equiv M_{\text{equi}}(\theta) + M_{\text{plane}}(\pi/2-\theta) = 4\theta^2 + 2\pi(\pi/2-\theta)$$

where θ is a transition angle from a defined point on the surface to where the second texture map is adjacent to the first texture map. The cited art fails to disclose or otherwise suggests this method. Indeed, the Office Action states that this claim if allowable is re-written in independent form.

Claim 7 further states that θ is equal to about 45°. *Xiong* and/or the other cited art does not disclose this. The Office Action also states that this claim if allowable is re-written in independent form.

Claim 8 further includes that providing the first texture map includes hexagonally re-parameterizing the cylindrical projection information using a linear transform. The cited art fails to disclose or otherwise suggests this method. Indeed, the Office Action states that this claim is allowable if re-written in independent form.

Claim 9 further specifies that the linear transform is definable as:

$$\hat{\mathbf{S}}(u,v) \equiv \mathbf{S}(\mathbf{V}\,(u,v)')$$

where

$$\mathbf{V} \equiv \begin{bmatrix} k & k/2 \\ 0 & 1 \end{bmatrix}$$

and $k \equiv 2\sqrt{3}/3$.

This method is clearly not described by *Xiong* as noted in the Office Action, which states that this claim is allowable if re-written in independent form.

In **Claim 10** the first texture map includes Mercator projection information for the first portion, and the second texture map includes stereographic projection information for the second portion. *Xiong* neither discloses nor reasonably suggests such a method.

Additionally, **Claim 11** adds that the method further includes providing a third texture map for a third portion of the three-dimensional surface, the third texture map being associated with the second mapping technique, and wherein the third texture map includes stereographic projection information for the third portion. This is clearly not described by *Xiong*.

Claim 12 further recites that the first and second texture maps are conformal and have a sampling requirement definable as:

$$M_{\text{capped}}(\theta) \equiv M_{\text{stereo}}(\theta) + M_{\text{Mercator}}(\pi/2 - \theta) = 16\tan^2(\theta/2) + \pi \ln((1+\cos\theta)/(1-\cos\theta))$$

where θ is a transition angle from a defined point on the surface to where the second texture map is adjacent to the first texture map. *Xiong* and/or the other cited art does not disclose this. Indeed, the Office Action states that this claim is allowable if re-written in independent form.

Claim 13 states that θ is equal to about 47.8°. Again, this method is clearly not described by *Xiong*. According to the Office Action this claim is also allowable if re-written in independent form.

Claim 14 recites that the cylindrical projection information includes information selected from at least one type of projection information selected from a group comprising plane-chart projection information, equal area information, and Mercator information. *Xiong* neither discloses nor reasonably suggests such a method.

Claim 15 specifies that the azimuthal projection information includes information selected from at least one type of projection information selected from a group comprising equidistant projection information, stereographic projection information, gnomonic projection information, and equal area projection information. The cited art fails to disclose or otherwise suggests this method.

Claim 16 adds that the first portion is significantly adjacent to both the first and second portions, such that the first portion separates the second and third portions. This is clearly not described by *Xiong*.

In **Claim 17** the three-dimensional surface is curvilinear. *Xiong* neither discloses nor reasonably suggests such a method.

Claim 18 further recites that the three-dimensional surface includes a spherical surface. *Xiong* neither discloses nor reasonably suggests such a method.

Claim 19 further specifies that providing the first texture map further includes generating the first texture map using the first mapping technique, and providing the second texture map further includes generating the second texture map using the second mapping technique. This method is not taught nor suggested by *Xiong*.

Claim 20 recites that at least one of the first and second texture maps includes information based on a rectangular sampling matrix. The cited art fails to disclose or otherwise suggests this method.

Claim 21 states that at least one of the first and second texture maps includes information based on a hexagonal sampling matrix. *Xiong* and/or the other cited art does not disclose this type of method.

Claim 70 further includes providing the first texture map further includes analyzing the texture map per at least one criterion to determine an appropriate texture resolution. *Xiong* neither discloses nor reasonably suggests such a method.

Claim 71 recites providing the first texture map further includes analyzing the texture map per at least one metric criterion to determine a requisite number of texture maps in addition to the first texture map. *Xiong* neither discloses nor reasonably suggests such.

Claim 22 is an independent claim directed towards a computer-readable medium providing computer instructions suitable for performing steps that includes providing a first texture map for a first portion of a three-dimensional surface, the first texture map being associated with a first mapping technique, and providing a second texture map for a second portion of the three-dimensional surface, the second texture map being associated with a second mapping technique that is different from the first mapping technique. *Xiong* neither discloses nor reasonably suggests such a computer-readable medium.

By way of example, as previously mentioned *Xiong* does not disclose or suggest nor would *Xiong* tolerate combining in anyway different types of map information. Instead *Xiong* selects images that share the same geometry and/or projection and then works to combined these to form a virtual panorama image. See, e.g., column 8, lines 18-33, where *Xiong* states that "the panorama is constructed on a particular geometry". The two-dimensional images and resulting three-dimensional in *Xiong* need to share a common geometry to support the blending process being taught. For example, *Xiong* teaches that overlapping rectangular images can be blended together using a blending mask after being configured in a Laplacian pyramid.

Claims 23-42, 72 and 73 depend from independent Claim 22. Consequently the exemplary reasons stated above are also applicable to these dependent claims. These dependent claims add additional elements/limitations to Claim 22 further distinguishing the claims over the cited art.

Claim 23 adds that the first texture map includes cylindrical projection information for the first portion, and the second texture map includes azimuthal projection information for the second portion. This is clearly not described by *Xiong*.

Claim 24 recites the further step of providing a third texture map for a third portion of the three-dimensional surface, the third texture map being associated with the second mapping technique, and wherein the third texture map includes azimuthal projection information for the third portion. *Xiong* and/or the other cited art does not disclose this type of computer-readable medium.

Claim 25 further specifies that the cylindrical projection information includes plane-chart projection information. This is not taught by *Xiong*.

Claim 26 further states that the azimuthal projection information includes equidistant projection information. The cited art fails to disclose or otherwise suggests this.

In **Claim 27** the first and second texture maps are stretch-invariant and have a sampling requirement definable as:

$$M_{\text{capped}}(\theta) \equiv M_{\text{equi}}(\theta) + M_{\text{plane}}(\pi/2-\theta) = 4\theta^2 + 2\pi(\pi/2-\theta)$$

where θ is a transition angle from a defined point on the surface to where the second texture map is adjacent to the first texture map. *Xiong* neither discloses nor reasonably suggests such a computer-readable medium. Indeed, the Office Action states that this claim is allowable if re-written in independent form.

Claim 28 further adds that θ is equal to about 45°. This is not disclosed by *Xiong*. The Office Action also states that this claim is allowable if re-written in independent form.

Claim 29 recites that providing the first texture map further includes means for hexagonally re-parameterizing the cylindrical projection information using a linear transform. This computer-readable medium is not taught nor suggested by *Xiong*. The Office Action agrees and states that this claim is allowable if re-written in independent form.

Claim 30 further recites that the linear transform is definable as:

$$\hat{\mathbf{S}}(u,v) \equiv \mathbf{S}(\mathbf{V}(u,v)')$$

where

$$\mathbf{V} \equiv \begin{bmatrix} k & k/2 \\ 0 & 1 \end{bmatrix}$$

and $k \equiv 2\sqrt{3}/3$.

Xiong neither discloses nor reasonably suggests such. The Office Action states that this claim is allowable if re-written in independent form.

Claim 31 further specifies that the first texture map includes Mercator projection information for the first portion, and the second texture map includes

stereographic projection information for the second portion. This computer-readable medium is not taught nor suggested by *Xiong*.

Claim 32 recites the further step of providing a third texture map for a third portion of the three-dimensional surface, the third texture map being associated with the second mapping technique, and wherein the third texture map includes stereographic projection information for the third portion. The cited art fails to disclose or otherwise suggests this.

Claim 33 adds that the first and second texture maps are conformal and have a sampling requirement definable as:

$$M_{\text{capped}}(\theta) \equiv M_{\text{stereo}}(\theta) + M_{\text{Mercator}}(\pi/2 - \theta) = 16\tan^2(\theta/2) + \pi\ln((1+\cos\theta)/(1-\cos\theta))$$

where θ is a transition angle from a defined point on the surface to where the second texture map is adjacent to the first texture map. *Xiong* neither discloses nor reasonably suggests such. Indeed, the Office Action states that this claim is allowable if re-written in independent form.

Claim 34 specifies that θ is equal to about 47.8°. *Xiong* and/or the other cited art does not disclose this. The Office Action states that this claim is also allowable if re-written in independent form.

Claim 35 further recites that the cylindrical projection information includes information selected from at least one type of projection information selected from a group comprising plane-chart projection information, equal area information, and Mercator information. The cited art fails to disclose or otherwise suggests this computer-readable medium.

Claim 36 further includes that the azimuthal projection information includes information selected from at least one type of projection information selected from a group comprising equidistant projection information, stereographic projection information, gnomonic projection information, and equal area projection information. *Xiong* neither discloses nor reasonably suggests such a computer-readable medium.

Claim 37 recites that the first portion is significantly adjacent to both the first and second portions, such that the first portion separates the second and third portions. The cited art fails to disclose or otherwise suggests this.

Claim 38 recites that the three-dimensional surface is curvilinear. *Xiong* neither discloses nor reasonably suggests such a computer-readable medium.

Claim 39 further states that the three-dimensional surface includes a spherical surface. *Xiong* neither discloses nor reasonably suggests such.

Claim 40 specifies that providing the first texture map further includes generating the first texture map using the first mapping technique, and providing the second texture map further includes generating the second texture map using the second mapping technique. This further computer-readable medium is not taught nor suggested by *Xiong*.

Claim 41 recites that at least one of the first and second texture maps includes information based on a rectangular sampling matrix. This is clearly not described by *Xiong*.

Claim 42 further states that at least one of the first and second texture maps includes information based on a hexagonal sampling matrix. This computer-readable medium is not taught nor suggested by *Xiong*.

In **Claim 72** providing the first texture map further includes analyzing the texture map per at least one criterion to determine an appropriate texture resolution. This is clearly not described by *Xiong*.

In **Claim 73** providing the first texture map further includes analyzing the texture map per at least one metric criterion to determine a requisite number of texture maps in addition to the first texture map. This is not taught nor suggested by *Xiong*.

Claim 43 is an independent claim directed towards an apparatus that includes logic configured to provide a first texture map for a first portion of a three-dimensional surface, the first texture map being associated with a first mapping technique and a second texture map for a second portion of the three-dimensional surface, the second texture map being associated with a second mapping technique that is different from the first mapping technique, and wherein the logic is further configured to output graphically displayable information based on at least a portion of the first and second texture maps. *Xiong* neither discloses nor reasonably suggests such an apparatus.

By way of example, as previously mentioned *Xiong* does not disclose or suggest nor would *Xiong* tolerate combining in anyway different types of map information. Instead *Xiong* selects images that share the same geometry and/or

projection and then works to combined these to form a virtual panorama image. See, e.g., column 8, lines 18-33, where *Xiong* states that "the panorama is constructed on a particular geometry". The two-dimensional images and resulting three-dimensional in *Xiong* need to share a common geometry to support the blending process being taught. For example, *Xiong* teaches that overlapping rectangular images can be blended together using a blending mask after being configured in a Laplacian pyramid.

Claims 44-64 depend from independent Claim 43. Thus, the exemplary reasons stated above applicable to these claims also. These dependent claims add additional elements/limitations to Claim 43 further distinguishing the claims over the cited art.

Claim 44 recites that the first texture map includes cylindrical projection information for the first portion, and the second texture map includes azimuthal projection information for the second portion. *Xiong* neither discloses nor reasonably suggests such.

Claim 45 further recites that the logic is further configured to provide a third texture map for a third portion of the three-dimensional surface, the third texture map being associated with the second mapping technique, and wherein the third texture map includes azimuthal projection information for the third portion. The cited art fails to disclose or otherwise suggests this apparatus.

Claim 46 states that the cylindrical projection information includes plane-chart projection information. *Xiong* neither discloses nor reasonably suggests this.

Claim 47 specifies that the azimuthal projection information includes equidistant projection information. *Xiong* neither discloses nor reasonably suggests such.

Claim 48 further recites that the first and second texture maps are stretch-invariant and have a sampling requirement definable as:

$$M_{\text{capped}}(\theta) \equiv M_{\text{equi}}(\theta) + M_{\text{plane}}(\pi/2-\theta) = 4\theta^2 + 2\pi(\pi/2-\theta)$$

where θ is a transition angle from a defined point on the surface to where the second texture map is adjacent to the first texture map. *Xiong* and/or the other cited art does not disclose this type of apparatus. Indeed, the Office Action states that this claim is allowable if re-written in independent form.

Claim 49 further specifies that θ is equal to about 45°. *Xiong* neither discloses nor reasonably suggests such an apparatus. The Office Action states that this claim is also allowable if re-written in independent form.

Claim 50 states that the cylindrical projection information in the first texture map has been hexagonally re-parameterized the using a linear transform. *Xiong* neither discloses nor reasonably suggests such. The Office Action states that this claim is allowable if re-written in independent form.

In **Claim 51** the linear transform is definable as:

$$\hat{\mathbf{S}}(u,v) \equiv \mathbf{S}(\mathbf{V}(u,v)')$$

where

$$\mathbf{V} \equiv \begin{bmatrix} k & k/2 \\ 0 & 1 \end{bmatrix}$$

and $k \equiv 2\sqrt{3}/3$.

The cited art fails to disclose or otherwise suggests this apparatus. Again, the Office Action states that this claim is allowable if re-written in independent form.

Claim 52 includes that the first texture map includes Mercator projection information for the first portion, and the second texture map includes stereographic projection information for the second portion. This is clearly not described by *Xiong*.

Claim 53 further recites that the logic is further configured to provide a third texture map for a third portion of the three-dimensional surface, the third texture map being associated with the second mapping technique, and wherein the third texture map includes stereographic projection information for the third portion. This apparatus is not taught nor suggested by *Xiong*.

Claim 54 specifies that the first and second texture maps are conformal and have a sampling requirement definable as:

$$M_{\text{capped}}(\theta) \equiv M_{\text{stereo}}(\theta) + M_{\text{Mercator}}(\pi/2 - \theta) = 16\tan^2(\theta/2) + \pi\ln((1+\cos\theta)/(1-\cos\theta))$$

where θ is a transition angle from a defined point on the surface to where the second texture map is adjacent to the first texture map. The cited art fails to disclose or otherwise suggests this apparatus. The Office Action states that this claim is allowable if re-written in independent form.

Claim 55 recites that θ is equal to about 47.8°. *Xiong* neither discloses nor reasonably suggests such an apparatus. The Office Action states that this claim is also allowable if re-written in independent form.

Claim 56 states that the cylindrical projection information includes information selected from at least one type of projection information selected from a group comprising plane-chart projection information, equal area information, and Mercator information. This is not described by *Xiong*.

Claim 57 further states that the azimuthal projection information includes information selected from at least one type of projection information selected from a group comprising equidistant projection information, stereographic projection information, gnomonic projection information, and equal area projection information. *Xiong* and/or the other cited art fail to disclose this type of apparatus

Claim 58 recites that the first portion is significantly adjacent to both the first and second portions, such that the first portion separates the second and third portions. *Xiong* neither discloses nor reasonably suggests such an apparatus.

Claim 59 further recites that the three-dimensional surface is curvilinear. *Xiong* neither discloses nor reasonably suggests such.

Claim 60 further recites that the three-dimensional surface includes a spherical surface. This is not described by *Xiong*.

Claim 61 specifies that the logic is further configured to analyze the texture map per at least one criterion to determine an appropriate texture resolution when

providing the first texture map. *Xiong* and/or the other cited art does not disclose this type of apparatus.

Claim 62 further specifies that the logic is further configured to analyze the texture map per at least one metric criterion to determine a requisite number of texture maps in addition to the first texture map when providing the first texture map. *Xiong* neither discloses nor reasonably suggests such an apparatus.

Claim 63 recites that at least one of the first and second texture maps includes information based on a rectangular sampling matrix. The cited art fails to disclose or otherwise suggests this further limitation.

Claim 64 states that at least one of the first and second texture maps includes information based on a hexagonal sampling matrix. *Xiong* neither discloses nor reasonably suggests this type of apparatus.

Claim 68 is an independent claim directed towards a method for generating a low-distortion area-preserving map for use in stochastic ray tracing computer generated graphics. The method includes projecting sampling patterns onto a three-dimensional surface, and projecting the resulting three-dimensional surface samples into two-dimensional histogram bins. *Xiong* and/or the other cited art does not disclose this type of polar-capped map set.

Claim 69 depends from independent Claim 68 and further recites projecting the sampling patterns includes a projection, $(u,v) = \mathbf{S}^{-1}(x,y,z)$, that is defined by the composition of at least two area-preserving bijections, wherein a first area-preserving bijection is a mapping from a hemisphere to a disk

$(u,v) = (x,y)/\sqrt{1+z}$, a second area-preserving bijection is from a disk to a half disk $(r',\theta') = (r,\theta/2)$. The cited art fails to disclose or otherwise suggests this.

Conclusion

While rejecting Claims 1-64 and 70-73 on page 3, the Office Action then states to the contrary on page 6 that Claims 6-9, 12-13, 27-30, 33-34, 48-51, and 54-55 would be allowable if re-written in independent form. If needed, clarification of these conflicting statements is respectfully requested

However, this clarification is probably not needed since, for at least the exemplary reasons presented above, all of the pending claims are clearly patentable over the cited art. It is respectfully requested, therefore, that the rejections and objections be reconsidered and withdrawn and the patent application be allowed.

Respectfully Submitted,

Dated: 12/22/2003

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